fraction).The dose was calculated based on 3D CT-planning using Oncentra Master Plan and PLATO planning software. Dose volume constrains which were analyzed for target were: V100, V150, V200, D90. Patients were monitored weekly during radiotherapy and 1,3,6,9 and 15 months after the end of the treatment and then at three months interval. Follow-up visit included physical examination, images: ultrasound of abdomen and chest X ray and CEA value assessment. The acute toxicities were graded according to the EORTC/RTOG scales.
Results: Median follow up was 34,4 months (range 18-58). Three local recurrences were observed. One patient died of intercurrent disease 12 months after the implantation which was unrelated to the brachytherapy. Grade 1 and 2 rectal toxicity was reported in ten patients (66,7%). Four patients (26.6%) reported Grade 3 toxicity. One patient (6,7%) required hospitalization and surgical intervention. The most common rectal symptoms were pain, bleeding, thin stool, rectal urgency and frequency and acute proctitis. However no fatal toxicity was observed.
Conclusions: HDR brachytherapy is a valid anal sphincter sparing treatment modality to carefully selected patients and can be successfully used for salvage in patients with no other treatment options. The treatment was well tolerated by majority of patients with acceptable degree of acute toxicities. Overall survival data need longer follow-up.

Electronic Poster: Brachytherapy track: Miscellaneous

EP-1612

Intraluminal radiotherapy in the treatment of inoperable cancer of the esophagus

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Purpose/Objective: develop a method of intraluminal radiotherapy for esophageal cancer.
Materials and Methods: In RCRC 52 inoperable patients with esophageal cancer were treated with the use of 1 step method intraluminal radiotherapy esophagus. In 63.4% of patients - constrictive inoperable esophageal cancer, at 36.6% - a recurrence of esophageal cancer after treatment. Morphologically, the tumor shows squamous cell carcinoma (55.8%) and adenocarcinoma of varying degrees of differentiation (44.2%). In 84.6% of cases of marked dysphagia II-IV degree. Conducting topometricheskogo planning endovascular office allows you to set the Intrastat for the intraluminal radiotherapy in residual lumen of the esophagus to 1mm. Irradiation is performed with high activity sources Ir192. Dosing at 1 cm from the active line, the length of the active line 5-16sm. Treatment is carried out in 3 fractions with an interval of 6-7 days ROD = 7Gr SOD = 35games. In 96.2% of patients treated as outpatients conducted. After a 2-week break in 80.8% of cases to pursue further therapy: 52% rate teletherapy ROD = 2g = 80iGr to SOD, in 28.8% of cases in combination with chemotherapy. Follow-up of 4-26 months. In all cases observed treatment effect (tumor resorption in 23.1% - the complete destruction of the tumor, reducing the severity of dysphagia). Complications: 23.1% of the cases of different severity of esophagitis (docked conservative), 1.9% (1 patient) - esophago-tracheal fistula (setting 'covering' nitinol stent).
Results: Follow-up of 4-26 months. In all cases observed treatment effect (tumor resorption in 23.1% - the complete destruction of the tumor, reducing the severity of dysphagia). Complications: 23.1% of the cases of different severity of esophagitis (docked conservative), 1.9% (1 patient) - esophago-tracheal fistula (setting 'covering' nitinol stent).
Carrying on 1 stage esophageal intraluminal radiotherapy reduces the severity of dysphagia, which contributes to the correction of metabolic disorders and improve the overall condition, creates the possibility of external beam radiotherapy and chemotherapy in patients previously considered incurable, and consequently improves the results of treatment.
Conclusions: Intraluminal radiotherapy of the esophagus is a highly effective and safe treatment for patients with inoperable cancer of the esophagus, especially combines with dysphagia tumor genesis, significantly improving the quality of life and its duration in these patients.

EP-1613

Depth determination of skin cancers treated with superficial barchytherapy: ultrasound vs. histopathology

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Purpose/Objective: The purpose of this study is to compare high frequency ultrasonography (HFUS) and histpathologic assessment done by punch biopsy to determine depth of basal cell carcinoma (BCC), in both superficial and nodular BCCs prior to brachytherapy treatment.
Materials and Methods: This study includes 20 patients with 10 superficial and 10 nodular BCCs. First, punch biopsy was done to confirm the diagnosis and to measure tumour depth (Breslow rate). Subsequently, HFUS was done to measure tumour depth to search for correlation of these two techniques.